

Dr. Duke's Phytochemical and Ethnobotanical Database

Chemicals Found in *Angelica archangelica*

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
1	2'-ANGELOYL-3'-ISOVALERYL-VAGINATE	Root	--	--		Phytochem. Anal. 3(1):42-48. 1992
2	2-NONANONE	Root	1	1		
10	5-METHOXY-PSORALEN	Plant	--	--		Pakistan Encyclopedia Planta Medica. 1986.
10	5-METHOXY-PSORALEN	Fruit	--	--		
1	8-(2-(3-METHYLBUTOXY)-3-HYDROXY-3-METHYLBUTOXY)PSORALEN	Root	--	--		Phytochem. Anal. 3(1):42-48. 1992
21	8-METHOXY-PSORALEN	Plant	--	--		
6	ACETALDEHYDE	Seed	--	--		Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.
1	ACONITIC-ACID	Plant	--	--		Pakistan Encyclopedia Planta Medica. 1986.
28	ADENOSINE	Root	--	--		Pakistan Encyclopedia Planta Medica. 1986.
28	ADENOSINE	Plant	--	--		Pakistan Encyclopedia Planta Medica. 1986.
3	ALANINE	Leaf	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
10	ALPHA-AMYRIN	Plant	--	--		J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
2	ALPHA-AMYRIN-ACETATE	Fruit	--	26		
20	ALPHA-BISABOLOL	Plant	--	--		Pakistan Encyclopedia Planta Medica. 1986.
2	ALPHA-HUMULENE	Root	18	50	1.4138559108869015	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
2	ALPHA-HUMULENE	Root Essent. Oil	--	--		
2	ALPHA-METHYL-BUTYRIC-ACID	Plant	--	--		Pakistan Encyclopedia Planta Medica. 1986.
11	ALPHA-PHELLANDRENE	Fruit	--	--		
11	ALPHA-PHELLANDRENE	Root Essent. Oil	--	225000		
11	ALPHA-PHELLANDRENE	Leaf Essent. Oil	--	678000	1.751978121762097	
11	ALPHA-PHELLANDRENE	Seed Essent. Oil	--	--		
11	ALPHA-PHELLANDRENE	Root	--	--		
28	ALPHA-PINENE	Seed	170	1500	-0.34027084756770226	
28	ALPHA-PINENE	Root	35	5890	2.1989183610646146	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
28	ALPHA-PINENE	Root Essent. Oil	--	--		
28	ALPHA-PINENE	Seed Essent. Oil	--	149000	0.28611774259215744	
28	ALPHA-PINENE	Fruit	--	--		
13	ALPHA-TERPINENE	Root	3	7	-0.6602197185589468	
13	ALPHA-TERPINENE	Fruit	--	--		
13	ALPHA-TERPINENE	Root Essent. Oil	--	--		
23	ALPHA-TERPINEOL	Plant	--	--		
23	ALPHA-TERPINEOL	Root	--	12	-0.5636245828350195	
1	ANGELIC-ACID	Plant	--	--		Pakistan Encyclopedia Planta Medica. 1986.
17	ANGELICIN	Root	--	--		
17	ANGELICIN	Seed	--	--		
17	ANGELICIN	Root Essent. Oil	--	35000		
3	AR-CURCUMENE	Root	2	6	-1	
2	ARCHANGELICIN	Plant	--	--		
2	ARCHANGELICIN	Root	--	--		
2	ARCHANGELICIN	Fruit	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	ARCHANGELICIN	Shoot	--	--		
2	ASPARAGINE	Leaf	--	--		
3	ASPARTIC-ACID	Leaf	--	--		
1	BEHENIC-ACID	Plant	--	--		Pakistan Encyclopedia Planta Medica. 1986.
26	BERGAPTEN	Seed	2	6800	1.5453742965682007	
26	BERGAPTEN	Root	--	--		
26	BERGAPTEN	Fruit	48	1300		
26	BERGAPTEN	Plant	--	--		
26	BERGAPTEN	Root Essent. Oil	--	88000		
26	BERGAPTEN	Shoot	--	--		
4	BETA-AMYRIN-ACETATE	Plant	--	--		Pakistan Encyclopedia Planta Medica. 1986.
6	BETA-BISABOLENE	Root	8	72	-1.2022170084503725	
6	BETA-BISABOLENE	Root Essent. Oil	--	--		
5	BETA-ELEMENE	Root	30	90	-1	
5	BETA-ELEMENE	Root Essent. Oil	--	--		
13	BETA-EUDESMOL	Root	1	21	1	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
13	BETA-EUDESMOL	Root Essent. Oil	--	--		
2	BETA-MYRCENE	Root	--	--		
3	BETA-PHELLANDRENE	Root	50	1000	1	
3	BETA-PHELLANDRENE	Fruit	--	--		
3	BETA-PHELLANDRENE	Root Essent. Oil	--	--		
13	BETA-PINENE	Root	2	2400	2.065213478268315	
13	BETA-PINENE	Root Essent. Oil	--	--		
13	BETA-PINENE	Seed Essent. Oil	--	--		
13	BETA-PINENE	Fruit	--	--		
3	BETA-SELINENE	Root	--	--		
5	BETA-SESQUIPHELLANDRENE	Root	--	7	-1	
47	BETA-SITOSTEROL	Plant	--	--		
47	BETA-SITOSTEROL	Seed	1.5	9.5	-0.627327401886418	
47	BETA-SITOSTEROL	Fruit	--	--		
2	BISABOLANGELONE	Plant	--	--		Pakistan Encyclopedia Planta Medica. 1986.
35	BORNEOL	Root	--	--		Pakistan Encyclopedia Planta Medica. 1986.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
35	BORNEOL	Plant	--	--		Pakistan Encyclopedia Planta Medica. 1986.
35	BORNEOL	Root Essent. Oil	--	--		
12	BORNYL-ACETATE	Root	25	75	-0.5747231818271519	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
5	BYAKANGELICIN	Root	--	13		
1	BYAKANGELICIN-ANGELATE	Root	--	8		
102	CAFFEIC-ACID	Plant	--	--		Pakistan Encyclopedia Planta Medica. 1986.
9	CAMPHENENE	Root	2	130	1.4108316199577506	
9	CAMPHENENE	Root Essent. Oil	--	--		
9	CAMPHENENE	Fruit	--	--		
19	CARVONE	Root	--	2	-0.7714223871650727	
31	CARYOPHYLLENE	Root	8	20	-0.6816330830044597	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
31	CARYOPHYLLENE	Root Essent. Oil	--	--		
3	CEDROL	Root	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
77	CHLOROGENIC-ACID	Plant	--	--		Pakistan Encyclopedia Planta Medica. 1986.
3	CIS-OCIMENE	Root	4	125		
3	CIS-OCIMENE	Root Essent. Oil	--	--		
2	CONIFERIN	Root	--	--		Pakistan Encyclopedia Planta Medica. 1986.
2	CONIFERIN	Plant	--	--		Pakistan Encyclopedia Planta Medica. 1986.
1	CUPARENE	Root	3	10	1	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
1	CUPARENE	Root Essent. Oil	--	--		
8	DELTA-3-CARENE	Root	30	505	1.4140772728836788	
9	DELTA-CADINENE	Root	1	101	1.4139785716108804	
9	DELTA-CADINENE	Root Essent. Oil	--	--		
2	DIACETYL	Root	--	--		Pakistan Encyclopedia Planta Medica. 1986.
2	ELEMOL	Root	6	18		
2	ELEMOL	Root Essent. Oil	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
5	ERGOSTEROL	Plant	--	--		Pakistan Encyclopedia Planta Medica. 1986.
5	ERGOSTEROL	Fruit	--	--		
24	ETHANOL	Root	--	--		
1	ETHYL-LAURATE	Root	--	--		
1	ETHYL-MYRISTATE	Root	--	--		
1	ETHYL-MYRISTATE	Root Essent. Oil	--	--		
1	ETHYL-OLEATE	Root	--	--		
1	ETHYL-PALMITATE	Root	10	10		
6	FENCHONE	Plant	--	--		Pakistan Encyclopedia Planta Medica. 1986.
6	FENCHONE	Root Essent. Oil	--	--		
8	FRUCTOSE	Plant	--	--		Pakistan Encyclopedia Planta Medica. 1986.
7	FUMARIC-ACID	Plant	--	--		Pakistan Encyclopedia Planta Medica. 1986.
6	FURFURAL	Root	--	--		Pakistan Encyclopedia Planta Medica. 1986.
11	GAMMA-TERPINENE	Root	1	11	-0.802453903453894	
11	GAMMA-TERPINENE	Root Essent. Oil	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	GERMACRENE-D	Root	2	26	1	
2	GERMACRENE-D	Root Essent. Oil	--	--		
7	GLUCOSE	Plant	--	--		Pakistan Encyclopedia Planta Medica. 1986.
5	GLUTAMINE	Leaf	--	--		
25	IMPERATORIN	Seed	50	5000	0.20180777184913837	
25	IMPERATORIN	Root	--	--		
25	IMPERATORIN	Fruit	--	66	1.940524885628408	
25	IMPERATORIN	Plant	--	--		
25	IMPERATORIN	Shoot	--	--		
8	ISOIMPERATORIN	Plant	--	--		
8	ISOIMPERATORIN	Seed	12	75	1	Wealth of India.
8	ISOIMPERATORIN	Root	--	--		
8	ISOIMPERATORIN	Fruit	--	4	-0.9645619455667129	
8	ISOIMPERATORIN	Shoot	--	--		
3	ISOLEUCINE	Leaf	--	--		
15	ISOPIMPINELLIN	Plant	--	--		
15	ISOPIMPINELLIN	Root	--	--		
15	ISOPIMPINELLIN	Fruit	--	18	1	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
15	ISOPIMPINELLIN	Root Essent. Oil	--	--		
7	LAURIC-ACID	Fruit	--	--		
1	LAURIC-ACID-ETHYL-ESTER	Root Essent. Oil	--	--		
7	LIGUSTILIDE	Plant	--	--		Pakistan Encyclopedia Planta Medica. 1986.
7	LIGUSTILIDE	Root	--	--		
60	LIMONENE	Root	440	1320	1.7252265137628358	
60	LIMONENE	Root Essent. Oil	--	227000	1.5228275750660336	
53	LINALOOL	Root	1	10	-0.41637162119267096	
53	LINALOOL	Root Essent. Oil	--	--		
27	LINOLEIC-ACID	Fruit	--	--		
2	LUPEOL-ACETATE	Plant	--	--		Pakistan Encyclopedia Planta Medica. 1986.
2	LUPEOL-ACETATE	Fruit	--	40		
15	LUTEIN	Leaf	--	--		
15	MALIC-ACID	Plant	--	--		
15	MALIC-ACID	Root	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
1	MALONIC-ACID	Root	--	--		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
2	METHANOL	Root	--	--		
22	MYRCENE	Root	7	380	1.4075966148229513	
22	MYRCENE	Root Essent. Oil	--	--		
22	MYRCENE	Seed Essent. Oil	--	--		
22	MYRCENE	Fruit	--	--		
6	MYRISTIC-ACID	Fruit	--	--		
2	OCTYL-ISOVALERATE	Root	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
2	OCTYL-ISOVALERATE	Root Essent. Oil	--	--		
18	OLEIC-ACID	Seed	--	133000	0.11423787911448594	
1	OLEIC-ACID-ETHYL-ESTER	Root Essent. Oil	--	--		
15	OSTHOL	Root	--	2000		
15	OSTHOL	Root Essent. Oil	--	530000		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
15	OSTHOL	Fruit	--	--		
4	OSTHOLE	Root	--	--		
1	OSTRUTHOL	Seed	9	57		Wealth of India.
1	OSTRUTHOL	Root	--	2000		
9	OXALIC-ACID	Plant	--	--		Pakistan Encyclopedia Planta Medica. 1986.
6	OXYPEUCEDANIN	Plant	--	--		
6	OXYPEUCEDANIN	Root	--	385	-1	
6	OXYPEUCEDANIN	Fruit	--	--		
6	OXYPEUCEDANIN	Shoot	--	--		
2	OXYPEUCEDANIN-HYDRATE	Plant	--	--		
2	OXYPEUCEDANIN-HYDRATE	Root	--	1500		
2	OXYPEUCEDANIN-HYDRATE	Seed	0.6	3.8	-1	Wealth of India.
2	OXYPEUCEDANIN-HYDRATE	Fruit	--	--		
2	OXYPEUCEDANIN-HYDRATE	Shoot	--	--		
16	P-CYMENE	Root	40	980	1.731986088156794	
16	P-CYMENE	Seed	800	5050	0.5834563158237798	Wealth of India.
16	P-CYMENE	Root Essent. Oil	--	--		

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13	PALMITIC-ACID	Seed	--	--		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
13	PALMITIC-ACID	Root Essent. Oil	--	60000	-0.14585513924522536	
13	PALMITIC-ACID	Fruit	--	--		
1	PALMITIC-ACID-ETHYL-ESTER	Root Essent. Oil	--	--		
2	PALMITOLEIC-ACID	Seed	--	--		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
2	PALMITOLEIC-ACID	Fruit	--	--		
1	PENTADECANOIC-ACID	Plant	--	--		Pakistan Encyclopedia Planta Medica. 1986.
2	PHELLOPTERIN	Plant	--	--		
2	PHELLOPTERIN	Root	--	--		Phytochem. Anal. 3(1):42-48. 1992
7	PHENYLALANINE	Leaf	--	--		
7	PIMPINELLIN	Plant	--	--		Pakistan Encyclopedia Planta Medica. 1986.
7	PIMPINELLIN	Fruit	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
7	PIPERITONE	Root	--	3		
31	PSORALEN	Plant	--	--		
31	PSORALEN	Root	2	140	1.2840756412696184	
31	PSORALEN	Fruit	--	310	-0.3807181031466607	
31	PSORALEN	Seed	--	100	-0.6857885534361138	
1	QUINIC-ACID	Plant	--	--		Pakistan Encyclopedia Planta Medica. 1986.
4	RUTAMARIN	Plant	--	--		Pakistan Encyclopedia Planta Medica. 1986.
5	SABINENE	Root	2	76	0.0843149140979014	
5	SABINENE	Root Essent. Oil	--	--		
5	SABINOL	Root	--	34		
44	SCOPOLETIN	Tissue Culture	--	--		
44	SCOPOLETIN	Root	--	--		
1	SPHONDIN	Plant	--	--		Pakistan Encyclopedia Planta Medica. 1986.
8	STEARIC-ACID	Plant	--	--		Pakistan Encyclopedia Planta Medica. 1986.
8	STEARIC-ACID	Fruit	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
12	STIGMASTEROL	Plant	--	--		Pakistan Encyclopedia Planta Medica. 1986.
12	STIGMASTEROL	Fruit	--	--		
7	SUCCINIC-ACID	Plant	--	--		Pakistan Encyclopedia Planta Medica. 1986.
14	SUCROSE	Root	--	--		Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
23	TERPINEN-4-OL	Root	--	10	-0.5731321285364237	
23	TERPINEN-4-OL	Root Essent. Oil	--	--		
9	TERPINOLENE	Root	6	16	-1	
9	TERPINOLENE	Root Essent. Oil	--	--		
2	THUJOPSENE	Root	--	--		
1	TIGLIC-ACID	Plant	--	--		Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
8	TRANS-ANETHOLE	Root	2	13		
2	TRANS-BETA-FARNESENE	Root	2	10		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
1	TRANS-CARVEOL	Root	4	11		
1	TRANS-CARVEOL	Root Essent. Oil	--	--		
2	TRIDECANOIC-ACID	Plant	--	--		Pakistan Encyclopedia Planta Medica. 1986.
29	TRYPTOPHAN	Leaf	--	--		
8	TYROSINE	Leaf	--	--		
22	UMBELLIFERONE	Plant	--	--		Pakistan Encyclopedia Planta Medica. 1986.
22	UMBELLIFERONE	Root	--	200		
22	UMBELLIFERONE	Fruit	--	--		
3	VALINE	Leaf	--	--		
2	VIOLAXANTHIN	Leaf	--	--		
1	VISNAGIN	Plant	--	--		Pakistan Encyclopedia Planta Medica. 1986.
43	XANTHOTOXIN	Seed	2	1900	-1	
43	XANTHOTOXIN	Root	--	--		
43	XANTHOTOXIN	Fruit	--	42	1	
43	XANTHOTOXIN	Plant	--	--		
43	XANTHOTOXIN	Shoot	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
5	XANTHOTOXOL	Seed	--	--		Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
5	XANTHOTOXOL	Plant	--	--		
5	XANTHOTOXOL	Fruit	--	--		
1	XANTHOXYLETIN	Plant	--	--		Pakistan Encyclopedia Planta Medica. 1986.
5	ZEAXANTHIN	Leaf	--	--		
6	ZINGIBERENE	Root	--	5	-1	